

=> fil reg; d que l3  
FILE 'REGISTRY' ENTERED AT 16:08:59 ON 23 JAN 2003  
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STRUCTURE FILE UPDATES: 22 JAN 2003 HIGHEST RN 480390-21-4  
DICTIONARY FILE UPDATES: 22 JAN 2003 HIGHEST RN 480390-21-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

L2 34 SEA FILE=REGISTRY ABB=ON GUGAAAUUAUCGCCACGUUCGGGC|GCCCCGAACGUGG  
CGAUAAUUUCAC|CUUCUCUAUUGUCACCGUGGUCCA|UGGACCACGGUGACAAUAGAGAAG|  
GGUUCUUUGACGGUGCGAUGAAG|CUUCAUCGCACCGUCAAAGGAACC/SQSN  
L3 8 SEA FILE=REGISTRY ABB=ON L2 AND SQL<100

=> d rn cn kwic nte lc l3 1-8; fil capl; s l3

L3 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS  
RN 478898-74-7 REGISTRY  
CN DNA, d(G-T-G-A-A-A-T-T-A-T-C-G-C-C-A-C-G-T-T-C-G-G-G-C-A-A) (9CI) (CA  
INDEX NAME)  
SQL 26

SEQ 1 gtgaaattat cgccacgttc gggcaa  
===== =====  
HITS AT: 1-24

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: CA, CAPLUS

L3 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS  
RN 288701-14-4 REGISTRY  
CN GenBank AX010438 (9CI) (CA INDEX NAME)  
SQL 24

SEQ 1 gggttcctttg acggtgcgat gaag  
===== =====  
HITS AT: 1-24

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

L3 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS  
RN 288701-13-3 REGISTRY  
CN GenBank AX010437 (9CI) (CA INDEX NAME)  
SQL 24

SEQ 1 cttctctatt gtcaccgtgg tcca  
===== =====  
HITS AT: 1-24

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: GENBANK

L3 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS  
RN 288701-12-2 REGISTRY  
CN GenBank AX010436 (9CI) (CA INDEX NAME)  
SQL 24

SEQ 1 gtgaaattat cgccacgttc gggc  
===== =====  
HITS AT: 1-24

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: GENBANK

L3 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS  
RN 250587-71-4 REGISTRY  
CN DNA, d(G-G-T-T-C-C-T-T-T-G-A-C-G-G-T-G-C-G-A-T-G-A-A-G) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 26: PN: WO9958713 SEQID: 17 claimed DNA  
SQL 24

SEQ 1 gggttcctttg acggtgcat gaag  
===== =====  
HITS AT: 1-24

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

L3 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS  
RN 250587-70-3 REGISTRY  
CN DNA, d(C-T-T-C-T-C-T-A-T-T-G-T-C-A-C-C-G-T-G-G-T-C-C-A) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 25: PN: WO9958713 SEQID: 16 claimed DNA  
SQL 24

SEQ 1 cttctctatt gtcaccgtgg tcca  
===== =====  
HITS AT: 1-24

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

L3 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS  
RN 250587-69-0 REGISTRY  
CN DNA, d(G-T-G-A-A-A-T-T-A-T-C-G-C-C-A-C-G-T-T-C-G-G-G-C) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 24: PN: WO9958713 SEQID: 15 claimed DNA  
SQL 24

SEQ 1 gtgaaattat cgccacgttc gggc  
===== =====  
HITS AT: 1-24

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

L3 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS  
RN 147483-38-3 REGISTRY  
CN DNA, d(G-T-G-A-A-A-T-T-A-T-C-G-C-C-A-C-G-T-T-C-G-G-G-C-A-A) (9CI) (CA  
INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Deoxyribonucleic acid, d(G-T-G-A-A-A-T-T-A-T-C-G-C-C-A-C-G-T-T-C-G-G-G-C-A-  
A)  
SQL 26

SEQ 1 gtgaaattat cgccacgttc gggcaa  
=====

SID 15 + 2

HITS AT: 1-24

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

LC STN Files: CA, CAPLUS

FILE 'CAPLUS' ENTERED AT 16:09:14 ON 23 JAN 2003  
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FILE COVERS 1907 - 23 Jan 2003 VOL 138 ISS 4  
FILE LAST UPDATED: 22 Jan 2003 (20030122/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

L4 4 L3

=> d ibib ab hitrn 1-4; fil hom

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2002:456919 CAPLUS  
DOCUMENT NUMBER: 138:33775  
TITLE: Detection and identification of salmonellas from poultry-related samples by PCR  
AUTHOR(S): Oliveira, S. D.; Santos, L. R.; Schuch, D. M. T.; Silva, A. B.; Salle, C. T. P.; Canal, C. W.  
CORPORATE SOURCE: Centro de Diagnostico e Pesquisa em Patologia Aviaria (CDPA), Faculdade de Veterinaria, Universidade Federal do Rio Grande do Sul (UFRGS), Porto Alegre, 91540-000, Brazil  
SOURCE: Veterinary Microbiology (2002), 87(1), 25-35  
CODEN: VMICDQ; ISSN: 0378-1135  
PUBLISHER: Elsevier Science B.V.  
DOCUMENT TYPE: Journal

LANGUAGE: English

AB A polymerase chain reaction (PCR) assay was developed for the generic detection of Salmonella sp. and the identification of S. Enteritidis (SE), S. Gallinarum (SG), S. Pullorum (SP) and S. Typhimurium (ST) in material collected in the field from poultry. The specificity and sensitivity of the assay combined with Rappaport-Vassiliadis selective enrichment broth (PCR-RV) were detd., and field samples were analyzed to verify the validity of the method application. Specificity of the assay was tested using 29 SE, 11 SG, 10 ST and 10 SP strains, along with 75 strains of 28 other Salmonella serovars and 21 strains of other bacterial genera. The assay was 100% specific for Salmonella detection and ST identification. The primer pair for SE, SG and SP also detected S. Berta. PCR detection limits for Salmonella at the genus level were 2 ST, 8 SE, 1.1.times.103 SG and 1.8.times.105 SP cells. At the serovar level, detection limits were 7 ST, 1.2.times.103 SE, 4.4.times.107 SG and 1.8.times.106 SP cells. At the genus level, PCR-RV detected .apprxeq.128% more pos. field samples than the std. microbiol. techniques and results were ready in 48 h instead of 7 days. PCR-RV method is diagnostic of Salmonella at the genus level and ST at the serovar level, although other tests are needed to identify SE, SG and SP to serovar level.

IT 478898-74-7

RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(gene invA-specific primer; use of PCR in conjunction with selective enrichment in Rappaport-Vassiliadis broth for detection and identification of Salmonella species in material collected in field from poultry)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:736979 CAPLUS

DOCUMENT NUMBER: 131:347466

TITLE: Method for detecting microorganisms in pharmaceutical, cosmetic and food products

INVENTOR(S): Gerbling, Klaus-Peter; Lauter, Frank-Roman; Grohmann, Lutz

PATENT ASSIGNEE(S): Bioinside G.m.b.H., Germany

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 9958713	A2	19991118	WO 1999-DE1471	19990510
WO 9958713	A3	20000810		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
DE 19822108	A1	20000203	DE 1998-19822108	19980512
AU 9950260	A1	19991129	AU 1999-50260	19990510
EP 1082465	A2	20010314	EP 1999-934505	19990510
R:	AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE, PT			
JP 2002514439	T2	20020521	JP 2000-548504	19990510

## PRIORITY APPLN. INFO.:

DE 1998-19822108 A 19980512  
WO 1999-DE1471 W 19990510

AB The invention relates to a method and a test kit for the economic detection of microorganisms in non-sterile pharmaceutical, cosmetic and food products in compliance with GMP regulations. Microorganism specific DNA primers and probes are used in PCR with fluorescence labels for fluorometric detection. Combinations of primers and probes are given for the detection of the various microorganisms.

IT **250587-70-3**

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(Salmonella 5'-FAM and 3'-TAMRA labeled probe; microorganism detection method for pharmaceutical and cosmetic and food products)

IT **250587-69-0**

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(Salmonella PCR forward primer; microorganism detection method for pharmaceutical and cosmetic and food products)

IT **250587-71-4**

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(Salmonella reverse primer; microorganism detection method for pharmaceutical and cosmetic and food products)

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:532363 CAPLUS

DOCUMENT NUMBER: 123:103629

TITLE: Detection of Salmonella gallinarum and S. typhimurium DNA in experimentally infected chicks by polymerase chain reaction

AUTHOR(S): Tuchili, Lawrence M.; Kodama, Hiroshi; Izumoto, Yoko; Mukamoto, Masafumi; Fukata, Tsuneo; Baba, Tsuyoshi

CORPORATE SOURCE: College Agriculture, University Osaka Prefecture, Osaka, 593, Japan

SOURCE: Journal of Veterinary Medical Science (1995), 57(1), 59-63

SID 15 +2

CODEN: JVMSEQ; ISSN: 0916-7250

DOCUMENT TYPE: Journal

LANGUAGE: English

AB DNA detection with polymerase chain reaction (PCR) as a mean of identifying Salmonella infection in chickens was compared with the conventional culture procedure. DNA was extd. from organs of exptl. infected chicks with either S. gallinarum or S. typhimurium. The pair of primers used were those directed at the InvA gene. Bacteria isolation was done by inoculating the pre-enrichment media with samples. As was expected a 284 bp fragment DNA was amplified from extd. DNA of infected organs by PCR. The results of our studies indicate that the PCR method is more sensitive than the conventional culture procedure since we were able to detect both S. gallinarum and S. typhimurium DNA not only in samples pos. for bacteria isolation but also in neg. samples. It was possible to detect Salmonella DNA in 15 out of 20 organ samples from chicks infected with S. gallinarum 21 h after infection, but, only five were pos. for bacteria isolation. Salmonella DNA was detected throughout the entire test period. The results of this study confirm that PCR is a useful tool for the detection of Salmonella infection in poultry.

IT **147483-38-3**

RL: AGR (Agricultural use); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(PCR primer; detection of Salmonella gallinarum and S. typhimurium DNA in exptl. infected chicks by polymerase chain reaction)

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:227530 CAPLUS

DOCUMENT NUMBER: 118:227530

TITLE: Polynucleotide probes for Salmonella

INVENTOR(S): Galan, Jorge; Curtiss, Roy Iii

PATENT ASSIGNEE(S): Washington University, USA  
SOURCE: PCT Int. Appl., 62 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9304202	A1	19930304	WO 1992-US6984	19920819
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
AU 9225095	A1	19930316	AU 1992-25095	19920819
EP 669989	A1	19950906	EP 1992-918989	19920819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
PRIORITY APPLN. INFO.:		US 1991-749447	19910822	
		WO 1992-US6984	19920819	

SID1512

AB Oligonucleotide .gtoreq.8-mers derived from the *S. typhimurium* invA, invB, invC, or invD genes (which confer invasiveness) are described (sequences given) for use as universal probes or primers for detection of almost any *Salmonella* species, strain, or serotype by hybridization assay or PCR. Genes invA, invB, invC, and invD encode proteins of mol. wts. 54, 64, 47, and 30 kDa, resp.; the 1st 3 are members of the operon invABC. The 4 genes were highly conserved in all *Salmonella* strains tested, except for invABC in *S. arizonae*, and were absent in other invasive enteric bacteria (*Yersinia*, *Shigella*, enteropathogenic *Escherichia coli*).

IT 147483-38-3

RL: USES (Uses)

(as primer or probe, for *Salmonella* detection by nucleic acid hybridization or PCR)

*also w/in 2658 BP sequence**nucleotide 287-310*

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FILE 'TOXCENTER' ENTERED AT 16:15:18 ON 23 JAN 2003

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*550-573 in there 351-374*

SID17 - 550-573

FILE COVERS 1907 TO 20 Jan 2003 (20030120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

TOXCENTER has been enhanced with new files segments and search fields. See HELP CONTENT for more information.

TOXCENTER thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2003 vocabulary. See <http://www.nlm.nih.gov/mesh/summ2003.html> for a description on changes.

L5 1 L3

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L5 ANSWER 1 OF 1 TOXCENTER COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:208183 TOXCENTER

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DOCUMENT NUMBER: CA13126347466A

TITLE: Method for detecting microorganisms in pharmaceutical,

cosmetic and food products  
AUTHOR(S): Gerbling, Klaus-Peter; Lauter, Frank-Roman; Grohmann, Lutz  
CORPORATE SOURCE: ASSIGNEE: Bioinside G.m.b.H.  
PATENT INFORMATION: WO 9958713 A2 18 Nov 1999  
SOURCE: (1999) PCT Int. Appl., 77 pp.  
CODEN: PIXXD2.  
COUNTRY: GERMANY, FEDERAL REPUBLIC OF  
DOCUMENT TYPE: Patent  
FILE SEGMENT: CAPLUS  
OTHER SOURCE: CAPLUS 1999:736979  
LANGUAGE: German  
ENTRY DATE: Entered STN: 20011116  
Last Updated on STN: 20020509

PCT  
pub.

## ABSTRACT:

The invention relates to a method and a test kit for the economic detection of microorganisms in non-sterile pharmaceutical, cosmetic and food products in compliance with GMP regulations. Microorganism specific DNA primers and probes are used in PCR with fluorescence labels for fluorometric detection. Combinations of primers and probes are given for the detection of the various microorganisms.

CLASSIFICATION CODE: 3-1

SUPPLEMENTARY TERMS: Miscellaneous Descriptors

microorganism contamination food drug cosmetics PCR  
fluorometry DNA sequences

REGISTRY NUMBER: 180310-17-2 (DNA (bacterium 16S rRNA gene fragment))

250588-29-5 (DNA (Salmonella inv A gene fragment))

REGISTRY NUMBER: 250579-32-9; 250579-31-8; 250587-72-5; 250587-89-4;

250588-07-9; 250588-10-4; 250588-08-0; 250588-09-1;

250588-14-8; 250588-05-7; 250588-06-8; 250587-67-8;

250587-66-7; 250587-80-5; 250588-00-2; 250587-99-6;

250587-68-9; 250587-81-6; 250587-98-5; 250587-64-5;

250587-63-4; 250587-78-1; 250587-96-3; 250587-95-2;

250587-97-4; 250587-65-6; 250587-79-2; **250587-70-3**; **250587-69-0**; 250588-01-3; 250587-74-7;250587-75-8; 250588-02-4; **250587-71-4**;

250587-61-2; 250587-54-3; 250587-77-0; 250587-92-9;

250587-93-0; 250587-62-3; 250587-76-9; 250587-94-1;

250588-04-6; 76823-03-5; 120718-52-7; 250588-15-9;

250588-16-0; 250588-19-3; 250587-91-8; 250588-03-5

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